TO: Federal Communication Commission
Wireless Bureau
Washington, DC 20554

FROM: Curtis D. ("Curt") Sanders
4707 Hillside Road
Harrisburg, PA 17109-5203

In the Matter of	)	
	)	
Amendment of Part 97 of the Commission's	)	WT Docket No. 16-239
Amateur Radio Service Rules to Permit Greater	)	
Flexibility in Data Communications	)	RM-11708

This petitioner is an active amateur radio service (ARS) operator, holding the FCC Extra Class license, K3URT. He is also a member of ARRL and participates in emergency uses and training on the amateur bands. This petitioner asks the proposed rule making and change to Part 97 Rules **not** be changed, and dismissed as currently Petitioned.

Let us address the ARRL's concerns:

"…the symbol rate limits are outdated, and hamper or preclude amateur radio experimentation with modern data transmission protocols that are available and in active use in other radio services."[1]

Indeed, on an international stage, the symbol rate regulations in the United States is behind the times. However, to claim that it hampers progress by keeping the current rates is without merit. Instead of increasing potential bandwidth, the trend has been to be more efficient with less. An example are the hundreds of digital stations operating digital modes quite sufficiently for emergency operations, when needed.

"…[t]he rest of the amateur radio operators in the world do not have this restrictive symbol rate requirement that is in the current Part 97."[2] Unfortunately, the world seems to have better regulatory enforcement than the United States where it is "self-regulated". Automatically controlled digital stations have been noted to interfere without the time honored "listen first" rule. Also noted is the passing of email by such stations that are not pursuant to the regulations or spirit of amateur radio.[3]

The FCC's concerns are to remove the baud rate limits in Section 97.307(f):

"…we seek comment on whether eliminating the baud rate limits would improve amateur communications, or would instead increase congestion." Listening on the amateur bands, it is evident that crowding is already *fait accompli*. Increasing a bandwidth, or allowing it to be unlimited in width from increased symbol rate on already heavily populated digital and Continuous Wave (CW) segments of the radio bands, will further crowd or overrun the bands.

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[1] FCC 16-96; WT Docket No. 16-239; RM-11708; II. 5.

[2] George Roth Comments at 1; see also Don West, Communications Director for the Response Division of the Indiana Department of Homeland Security, Comments at 1 ("expanding the bandwidth [sic] of digital communications in the Amateur radio HF spectrum would likely result in a significant increase in the number of citizens and emergency management agencies which would still have access to email during a significant disruption of Internet service, potentially saving a significant number of lives and property)."; III. 7.

[3] ¶ 97.111 Authorized transmissions, attention to Section 5.

"…we seek comment on whether the costs of such an increase are outweighed by the benefits…" Potentially the cost of implementation would be the loss of other amateur activities, e.g. hobby, ongoing experimentation in other digital modes, interference to emergency management agencies liaise with amateur operators.

In general, emergency communications justify the "cost" of service expansion.[4] However, the nature of the petition is largely directed to the HF bands were emergencies are minimal and emergency communications are usually local - low band HF and VHF/UHF bands adequately accommodate.

The argument of potentially saving lives and property is exaggeration and conjecture. Existing modes have quite adequately served the community at-large over the years.

"…we tentatively conclude that a specific bandwidth limitation for RTTY and data emissions in the MF/HF bands is not necessary." Band space is already very crowded. Typical bandwidth currently used by operators, depending upon mode, is from 30 Hz to 500 Hz. Introducing a 2800 Hz bandwidth would cause interference and crowd-out existing operators. A 2800 Hz bandwidth would, in theory, consume 46 Phase Shift Key 31 baud (PSK-31) operators, 53 CW operators or 11 radio teletype (RTTY) operators within 2800 Hz![5] To implement a 2800 Hz bandwidth to accommodate a minority of "experimenters"[6] or "emergency operations" is *de facto* elimination of hobbyists, other experimenters and emergency management agencies already liaison with amateur operators on the digital and CW segments of the amateur bands.

The proposed change would only benefit a minority of ARS operators, i.e. proposed PACTOR IV[7] and WINLINK modes. Thousands of global and local ARS operators use, on a daily basis, other modes of digital communications. For example, the popular CW, PSK, RTTY modes are routinely active and rarely use over 500 Hz in bandwidth, more commonly around 200 Hz or less. Indeed, the increasingly popular mode JT-65, a pioneer in propagation and experimentation, would also suffer.

The Rule Making accommodates a minority of amateur radio operators in the HF spectrum.

SUMMARY. The principle argument of the cited Petition is that technology has marched on and the Part 97 Rules are outdated[8] because of the limitations currently imposed.

What is really implied in the Petition guise is for a minority of ARS operators to impose emissions rates on a *majority* of other operators who use RTTY, CW and other digital modes using smaller, more efficient bandwidth.

The Petition would actually have the opposite effect in encouraging the advancement of the ARS and experimentation. It would further degrade communications with international operators and lead to ill-will, contrary to Part 97 Rules.[9]

Furthermore, the proposal is biased toward the emergency services in association with the ARRL and agencies of the Federal government. The benefactors of this change are such entities as

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[4] FCC 10-124.

[5] Assuming PSK-31 at 60 Hz; CW at 52 Hz; 250 Hz for 45.45 baud RTTY, for bandwidth.

[6] The proposal claims the need for revision of Part 97 symbol rate because of needed future experimentation. However, the only benefiting "experiments" using such width, already exist. Too experiment suggests something new.

[7] Pactor IV uses 2400 Hz bandwidth; http://www.scs-ptc.com/en/PACTOR-4.html ; Special Communications Systems GmbH (SCS). Pactor has a symbol rate of 1800.

[8] §97.3 (c). Also see §97.307(f).

[9] §Part 97.1 "(e).

evidenced in the Petition.[10] Although the ARS has a long history of participating and providing adjunct, non-paid emergency operations, *it should be reminded that the ARS is **not** an emergency military or email radio service, but a service to draw upon operators for those purposes.*[11] The Rule Making flirts on the edges of pecuniary commercial radio service.

Further, if the Rule Making is codified, the FCC has not entertained enforcement details for the HF bands nor the resources to police them.

It is suggested that the FCC and other agencies coordinate with the International Telegraph Union in expanding the HF frequencies for ARS use. The unlimited symbol rate is more suited to the VHF/UHF spectrum. The technology of today; computers, Internet, etc., was not present decades ago when the HF bands were allocated for use. Succinctly, wide bandwidth signals on a narrow spectrum are not compatible as defined by the currently regulatory parameters assigned to amateur radio.

Thank you.

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[10] III. DISCUSSION, 7. "…particularly to facilitate more efficient transmission of emergency communications."

[11] "One of the fundamental principles underlying the amateur radio service is the '[r]ecognition and enhancement of the value of the amateur service to the public as a voluntary noncommercial communication service, particularly with respect to providing emergency communications.'" 47 C.F.R. § 97.1(a). Quoted from FCC 10-124, II. BACKGROUND, 3.